Applicant: Francisco Corella Serial No.: 09/483,186 Filed: January 14, 2000

Docket No.: 10001559-1/H300.126.101

Title: LIGHTWEIGHT PUBLIC KEY INFRASTRUCTURE EMPLOYING UNSIGNED CERTIFICATES

### **REMARKS**

The following remarks are made in response to the above summarized telephonic Examiner Interview of July 13, 2005 and the Non-Final Office Action mailed July 28, 2005. With this response, claim 1-3, 6, 9-15, 18, and 21-24 are amended, and claims 25-28 are added. Claims 1-28 are pending in the application and are presented for consideration and allowance.

### Claim Rejections under 35 U.S.C. § 112

The Examiner rejected claims 1-24 under 35 U.S.C. § 112, second paragraph stating "the terms "certificate authority" and "certificate" by definition, include a digital signature. The Examiner asserted that applicant has used both terms in conjunction with "unsigned certificate," which is opposite of the common use of "certificate authority" and "certificate."

As indicated in the above Examiner Interview Summary, in the July 13, 2005, Examiner Interview, Supervisory Patent Examiner Morse agreed that the above-amendments to the claims overcome the § 112 rejections.

Therefore, Applicants respectfully request that rejections to these claims under 35 U.S.C. § 112, second paragraph, be reconsidered, and that the rejections be removed and these claims be allowed.

# Claim Rejections under 35 U.S.C. § 103

The Examiner rejected claims 1, 2, 6, 7, 8, 13, 14, 18, 19, and 20 under 35 U.S.C. § 103(a) as being anticipated by the Andrews et al. U.S. Patent No. 6,324,645 in view of the Fischer U.S. Patent No. 5,475,826.

The Examiner rejected claims 3, 4, 15, and 16 under 35 U.S.C. § 103(a) as being unpatentable over the Andrews et al. U.S. Patent No. 6,324,645 in view of the Maruyama U.S. Patent No. 6,393,563.

The Examiner rejected claims 5 and 17 under 35 U.S.C. § 103(a) as being unpatentable over the Andrews et al. U.S. Patent No. 6,324,645 in view of the Kausik U.S. Patent No. 6,263,446.

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The Examiner rejected claims 9 and 21 under 35 U.S.C. § 103(a) as being unpatentable over the Andrews et al. U.S. Patent No. 6,324,645 in view of the Gasser U.S. Patent No. 5,224,163.

The Examiner rejected claims 10, 11, 22, and 23 under 35 U.S.C. § 103(a) as being unpatentable over the Andrews et al. U.S. Patent No. 6,324,645 in view of the Micali U.S. Patent No. 5,793,868 in view of the Boyle 6,212,636.

The Examiner rejected claims 12 and 24 under 35 U.S.C. § 103(a) as being unpatentable over the Andrews et al. U.S. Patent No. 6,324,645 in view of the Micali U.S. Patent No. 5,793,868 in view of the Boyle U.S. Patent No. 6,212,636 in view of the Gasser U.S. Patent No. 5,224,163.

Independent claims 1 and 13 are not taught or suggested by the combination of the Andrews et al. patent and the Fischer patent. The Examiner admits that the Andrews et al. patent does not teach a verifier maintaining cryptographic hashes. The Examiner cites the Fischer patent which teaches maintaining hashes of files in a security database.

Amended independent claims 1 and 13 includes limitations of a certificate authority issuing a first certificate to a subject, the first certificate including a public key of the subject, long-term identification information related to the subject, and meta-data related to the first certificate, wherein the first certificate is not signed by the certificate authority. The certificate authority maintains a database of records representing issued certificates in which it stores a record representing the first certificate, wherein the issued certificates are valid until at least one of revoked by the certificate authority and expired. Amended independent claims 1 and 13 further recite that a verifier maintains a hash table containing cryptographic hashes of valid certificates corresponding to the records stored in the database and including a cryptographic hash of the first certificate.

Neither the Andrews et al. patent nor the Fischer patent teach or suggest a verifier maintaining a hash table containing cryptographic hashes of valid certificates wherein issued certificates are valid until at least one of revoked by the certificate authority and expired, wherein the hash table includes a cryptographic hash of the first certificate having a public key of the subject, long-term identification information related to the subject, and meta-data related to the first certificate, wherein the first certificate is not signed by the certificate authority as recited in amended independent claims 1 and 13. As admitted by the Examiner,

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the Andrews et al. patent does not teach a verifier maintaining cryptographic hashes, furthermore, the Fischer patent teaches a system that maintains hashes of **files** in a security database not a verifier maintaining a hash table containing cryptographic hashes of **valid certificates**, wherein issued certificates are valid until at least one of revoked by the certificate authority and expired and the hash table includes a cryptographic hash of the first certificate including a public key of the subject, long-term identification information related to the subject, and meta-data related to the first certificate, wherein the first certificate is not signed by the certificate authority.

In view of the above, amended independent claims 1 and 13 are not taught or suggested by the combination of the Andrews et al. patent and the Fischer patent. As dependent claims 2-12 further define patentably distinct amended independent claim 1; and as dependent claims 14-24 further define patentably distinct amended independent claim 13, these dependent claims are also believed to be allowable. Therefore, Applicant respectfully requests that the § 103 rejections to claims 1-24 be removed and that these claims allowed.

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### New Claims 25-28

As new dependent claims 25-27 further define patentably distinct amended independent claim 1, and as new dependent claim 28 further defines patentably distinct amended independent claim 13, these new dependent claims are also believed to be allowable. Therefore, Applicant respectfully requests that new dependent claims 25-28 be allowed.

### **CONCLUSION**

In view of the above, Applicant respectfully submits that pending claims 1-28 are in form for allowance. Therefore, reconsideration and withdrawal of the previous rejections, and allowance of claims 1-28, is respectfully requested.

Applicant hereby authorizes the Commissioner for Patents to charge Deposit Account No. 08-2025 the amount of \$200.00 to cover fees as set forth under 37 C.F.R. 1.16(h)(i).

The Examiner is invited to telephone the Applicant's representative at the belowlisted numbers to facilitate prosecution of this application.

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Any inquiry regarding this Amendment and Response should be directed to either Patrick G. Billig at Telephone No. (612) 573-2003, Facsimile No. (612) 573-2005 or William P. O'Meara at Telephone No. (970) 898-7917, Facsimile No. (970) 898-7247. In addition, all correspondence should continue to be directed to the following address:

**Hewlett-Packard Company** 

Intellectual Property Administration P.O. Box 272400 Fort Collins, Colorado 80527-2400

Respectfully submitted,

Francisco Corella,

By his attorneys,

DICKE, BILLIG & CZAJA, PLLC Fifth Street Towers, Suite 2250 100 South Fifth Street Minneapolis, MN 55402 Telephone: (612) 573-2003

Facsimile: (612) 573-2005

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Date: 10-28-05

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Patrick G. Billig' Reg. No. 38,080

<u>CERTIFICATE UNDER 37 C.F.R. 1.8</u>: The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this <u>Aday of October</u>, 2005.

Name: Patrick G. Billig